



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **059/20**
Issued On **09/10/2020**
ORC Ref **02920000RPV**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 589kg
Maximum **604kg**
Minimum* **453kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	669.8	0.8958
Non Spin OSN	649.6	0.9236

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration
Symmetric: **Yes** 92.02
Asymmetric: **Yes** 91.45
Flying H/S: **No**
Spin. Pole: **Yes**

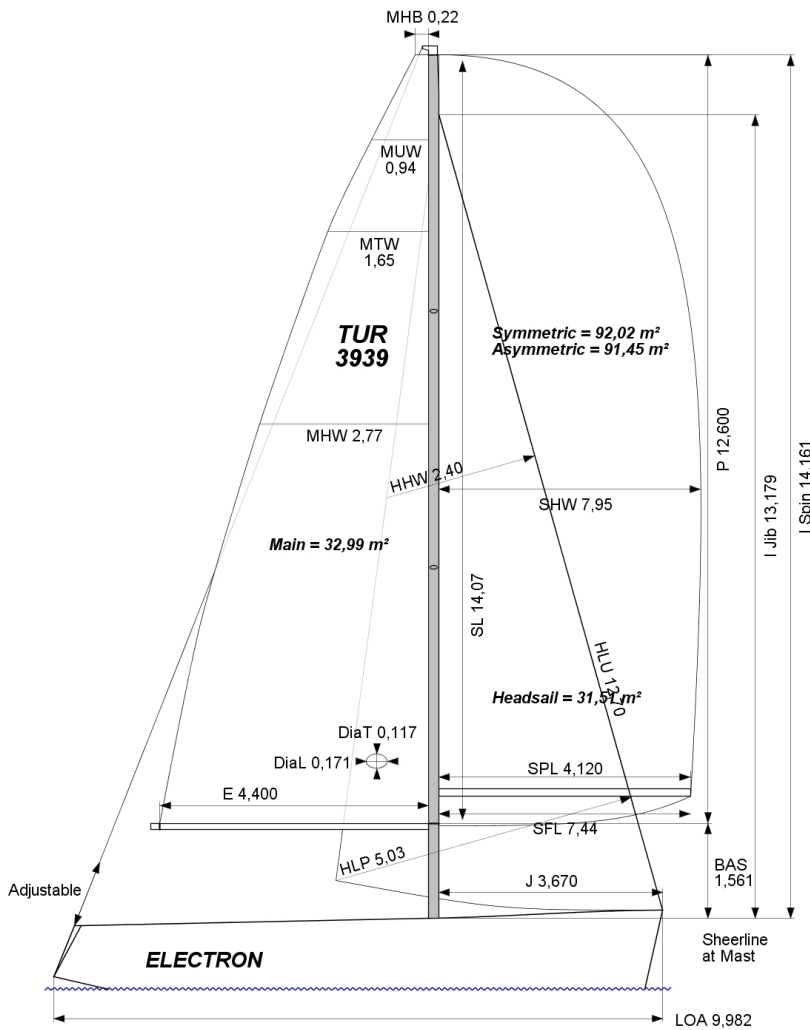
Class Division Length

CDL = 8.684

Stability (Estimated)

Limit Positive Stab.: **127.4°**
Stability Index: **127.0**

Owner



BOAT		GPH	HULL			
Name	ELECTRON	633.0	Data File	TUR3939 LOA 9.982m		
Sail Nr	TUR-3939		Offset File	F235.OFF MB 3.372m		
CLASS			Displacement	4,635kg Draft 2.002m		
Class	FIRST 34.7		IMS Division	Cruiser/Racer Dynamic All. 0.113%		
Designer	FARR BRUCE		Plan Review	Construction Solid		
Builder	BENETEAU		Fiber Rigging	No Aramid Core No		
Series	02/2005		Crew Arm Ex	Carbon Rudder No		
Age Date	12/2007			Light Stanchions No		
Age Allowance	0.487%		IMSL	9.110m VCGD -0.100m Sink 16.45kg/mm		
COMMENTS			RL	8.265m VCGM -0.087m WS 22.15m²		
PROPELLER			LSM0	8.969m Displacement/Length ratio 6.4242		
Installation	Strut	PRD	Water Ballast	0 Trim Tab No		
Type	Folding 2 blades	PIPA	BLR Index	0.0000		
			CENTERBOARD			
			N/A			
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	615.8			685.3		
Time on Time	0.9744			0.9849		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	720.5	561.8	505.4	929.5	686.9	603.3
Time on Time	0.9368	1.2014	1.3357	0.7262	0.9827	1.1188

2020

ORC Club Certificate Appendix

BOAT	
Name	ELECTRON
Sail Nr	TUR-3939
Certificate Number	059/20
Issued On	09/10/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1071.4	890.5	783.6	734.5	717.7	711.4	713.8
52°	700.9	592.3	539.2	517.9	509.8	506.3	505.8
60°	662.1	566.0	525.2	506.4	496.4	492.1	490.1
75°	634.2	548.3	515.1	495.9	481.3	470.3	461.9
90°	636.1	538.2	503.7	491.6	475.7	459.1	435.0
110°	627.1	529.9	494.8	470.0	451.0	438.9	419.0
120°	645.6	539.4	499.9	473.1	447.0	424.3	399.3
135°	715.4	583.2	519.7	490.0	464.0	438.1	389.5
150°	845.0	675.8	572.6	518.3	491.0	466.9	420.2
Run VMG	975.7	780.4	660.3	585.9	534.2	502.2	455.6
Selected Courses							
Windward / Leeward	1023.6	835.4	722.0	660.2	626.0	606.8	584.7
Circular Random	866.3	701.8	614.4	564.3	534.0	514.5	490.1
Coastal / Long Distance	1018.8	784.3	653.4	582.1	544.4	514.7	468.3
Non Spinnaker	932.9	748.7	649.0	591.0	555.5	532.8	505.1

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.8°	41.3°	40.5°	39.0°	38.6°	38.6°	39.0°
Beat VMG	3.36	4.04	4.59	4.90	5.02	5.06	5.04
52°	5.14	6.08	6.68	6.95	7.06	7.11	7.12
60°	5.44	6.36	6.85	7.11	7.25	7.31	7.35
75°	5.68	6.57	6.99	7.26	7.48	7.65	7.79
90°	5.66	6.69	7.15	7.32	7.57	7.84	8.28
110°	5.74	6.79	7.28	7.66	7.98	8.20	8.59
120°	5.58	6.67	7.20	7.61	8.05	8.48	9.02
135°	5.03	6.17	6.93	7.35	7.76	8.22	9.24
150°	4.26	5.33	6.29	6.95	7.33	7.71	8.57
Run VMG	3.69	4.61	5.45	6.14	6.74	7.17	7.90
Gybe Angles	145.5°	149.0°	151.0°	159.0°	180.0°	180.0°	180.0°